WHAT IS CLAIMED IS:

1. A method for processing a digital color image, comprising the steps of:

a) providing a subject matter detector for distinguishing between target and background subject matters;

b) applying the subject matter detector to the image to produce a belief map indicating the degree of belief that pixels in the image belong to target subject matter;

c) providing an image enhancement operation that is responsive to a control signal for controlling the degree of image enhancement; and

d) applying image enhancement operation to the digital image by varying the control signal according to the belief map to produce an enhanced image.

2. The method claimed in claim 1, wherein a plurality of subject matter detectors are provided, and further comprising the step of selecting one or more of the provided subject matter detectors.

3. The method claimed in claim 1, wherein a plurality of image enhancement operations are provided, and further comprising the step of selecting one or more of the provided image enhancement operations.

4. The method claimed in claim 1, wherein the target subject matter is human flesh.

5. The method claimed in claim 1, wherein the target subject matter is clear blue sky.

6. The method claimed in claim 1, wherein the target subject matter is lawn grass.

7. The method claimed in claim 1, wherein the target subject matter is snow field.

8. The method claimed in claim 1, wherein the target subject matter of is a body of water.

9. The method claimed in claim 1, wherein the image enhancement operation is sharpening.

10. The method claimed in claim 1, wherein the image enhancement operation is noise reduction.

11. The method claimed in claim 1, wherein the image enhancement operation is tone scale adjustment.

12. The method claimed in claim 1, wherein the image enhancement operation is scene balance adjustment.

13. The method claimed in claim 1, wherein the image enhancement operation is color re-mapping.

14. The method claimed in claim 1, wherein the image enhancement operation is JPEG de-blocking.

15. The method claimed in claim 1, wherein the image enhancement operation is image magnification employing interpolation.

16. The method claimed in claim 15, wherein the image interpolation is selectable between bilinear interpolation and fractal based interpolation.

17. The method claimed in claim 2, wherein the target subject matters include human flesh, clear blue sky, lawn grass, snow fields, and water bodies.

18. The method claimed in claim 3, wherein the image enhancement operations include sharpening, noise reduction, JPEG de-blocking, tone scale adjustment, scene balance adjustment, and color re-mapping.

19. The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and to a signal related to the sizes of regions within the belief map.

20. The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and a signal related to the locations of regions within the belief map.

21. The method claimed in claim 1, wherein the control signal is varied in accordance to the belief map and a scalar derived from an analysis of the belief map.

22. The method claimed in claim 1, further comprising the step of reducing the resolution of the digital color image prior to applying the subject matter detector.

23. The method claimed in claim 1, further comprising the step of analyzing the belief map to generate the control signal.

24. The method claimed in claim 23, wherein the analysis includes determining the size of each belief region and enhancing the control signal based on the size.

25. A computer program product for performing the method of claim 1.

26. A system for processing a digital color image, comprising:

a) a subject matter detector for distinguishing between target and background subject matters in the digital color image to produce a belief map indicating the degree of belief that pixels in the digital color image belong to target subject matter; and

b) an image enhancement operator responsive to the belief map for controlling the degree of image enhancement in accordance with the degree of belief.